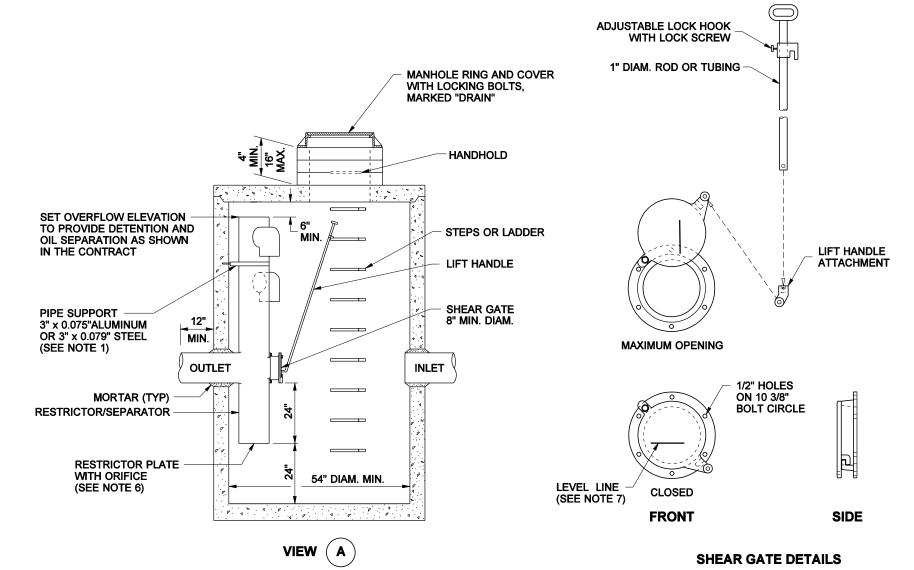


**ELBOW DETAIL** 







## NOTES

- 1. The pipe supports and the restrictor/separator shall be constructed of the same material and be anchored at a maximum spacing of 36". Attach the pipe supports to the manhole with 5/8" stainless steel expansion bolts or embed the supports into the manhole wall 2".
- 2. The vertical riser stem of the restrictor/separator shall be the same diameter as the horizontal outlet pipe with a minimum diameter of 8".
- 3. The flow restrictor/separator shall be fabricated from one of the following materials:
  - 0.060" Corrugated Aluminum Allov Drain Pipe
  - 0.064" Corrugated Galvanized Steel Drain Pipe with Treatment 1
  - 0.064" Corrugated Aluminized Steel Drain Pipe
  - 0.060" Aluminum alloy flat sheet, in accordance with ASTM B 209M, 5052 H32 or EPS
  - High Density Polyethylene Storm Sewer Pipe
- 4. The frame and ladder or steps are to be offset so that: the shear gate is visible from the top; the climb-down space is clear of the riser and gate; the frame is clear of the curb.
- 5. The multi-orifice elbows may be located as shown, or all placed on one side of the riser to assure ladder clearance. The size of the elbows and their placement shall be specified in the Contract.
- 6. Restrictor plate with orifice as specified in the Contract. Omit plate if for oil pollution control only. The opening is to be cut round and smooth.
- 7. The shear gate shall be made of aluminum alloy in accordance with ASTM B 26M and ASTM B 275, designation ZG32A; or cast iron in accordance with ASTM A 48, Class 30B.
  - The lift handle shall be made of a similar metal to the gate (to prevent galvanic corrosion), it may be of solid rod or hollow tubing, with adjustable hook as required.
  - A neoprene rubber gasket is required between the riser mounting flange and the gate flange.
  - Install the gate so that the level-line mark is level when the gate is closed.
  - The mating surfaces of the lid and the body shall be machined for proper fit.
  - All shear gate bolts shall be stainless steel.
- 8. The shear gate maximum opening shall be controlled by limited hinge movement, a stop tab, or some other device.
- 9. Alternate shear gate designs are acceptable, if material specifications are met and flange bolt pattern matches.



CATCH BASIN TYPE 2
WITH FLOW RESTRICTOR
-OIL SEPARATOR
STANDARD PLAN B-3

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

Harold J. Peterfeso

STATE DESIGN ENGINEER

09/01 REVISED NOTES 3, 7 AND VIEW A MAS

DATE REVISION BY

Washington State Department of Transportation

01-28-02

APPROVED FOR PUBLICATION